# STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES DIVISION OF FORESTRY



## **DELTA AREA FORESTRY**

## FINAL DECISION BEST INTEREST FINDING FOR MISSISSIPPI FIRE SALVAGE ADL – 419335

**December 05, 2013** 

#### A. ACTION

DOF is proposing to offer for sale approximately 6,800 acres of burned white spruce, birch and aspen saw-timber and fuelwood from state lands within the 2013 Mississippi Range Fire perimeter, roughly two air miles west of Delta Junction, Alaska. The volume to be offered totals approximately 8.567 million board feet (MMBF) or 4.280 million cubic feet (MMCF). DOF would sell the timber in a combination of competitive and negotiated sales for commercial use. Personal use firewood permit harvests will be facilitated through the commercial operations constructing and maintaining access to the area over the winter season(s).

The management objectives for the proposed timber sales are:

- Harvest the commercial sawtimber and fuelwood before significant loss occurs.
- Return the site to a young productive mixed stand forest to include balsam poplar, birch, aspen, and white spruce.
- Provide timber products for the industry and the state and local economy.
- Provide accessible firewood for the residential heating needs of local residents.

#### B. STATUTORY AND REGULATORY AUTHORITY

The Division is taking this action under the authority of

- AS 38.05.035(e) Best Interest Finding;
- AS 38.05.110-120 and 11 AAC 71, Timber Sale Statutes and Regulations; and
- AS 41.17.010-950 and 11 AAC 95 Forest Resources and Practices Statutes and Regulations.

#### C. ADMINISTRATIVE RECORD

The Division will maintain an administrative record regarding the decision of whether or not to proceed with the action as proposed. This record will be maintained at the DOF's Delta Office filed as ADL-419335.

#### D. SCOPE OF DECISION

This Final Best Interest Finding (FBIF) completes step two of a five-step process used to design, sell, and administer timber sales. This FBIF covers the sale of approximately 6,800 acres of burned timber on state land within the perimeter of the 67,288-acre Mississippi Range Fire. The following list summarizes the overall process:

Step 1: Regional planning. The Department of Natural Resources (DNR) develops area plans and state forest management plans to designate appropriate uses for state land, classify the land accordingly, and establish management guidelines for multiple use. These plans determine where timber sales are an allowed use, and what other uses must be considered when designing and implementing sales. Subsequent land use decisions must be consistent with the area plans. The area in this FBIF is covered by the Tanana Basin Area Plan. The finding also considers the Interagency Wildland Fire Management Plan. There are no Community Wildfire Protection Plans in this area. The proposed area is not within a municipality, therefore no municipal plans apply.

Step 2: Best Interest Finding. A best interest finding is the decision document that:

- Establishes the overall area within which the timber sale may occur,
- Determines the amount of timber that will be offered for sale and the duration of the sale,
- Sets the overall harvest and reforestation strategy for the sale area,
- Determines whether the sale proposal complies with the Alaska Constitutional requirement to manage for sustained yield by evaluating the amount of timber in the sale and the annual allowable cut for the affected area,
- Selects the appropriate method of sale (i.e., competitive or negotiated sale), and

• Determines the appraisal method that will be used to determine the sale price.

The Preliminary Best Interest Finding (PBIF) is intended to provide sufficient information for reviewers to ensure that the best interest of the State will be served by the proposed action.

The PBIF provided details regarding the decision to sell approximately 6,800 acres of burned white spruce, birch and aspen sawtimber and fuelwood from state lands within the 67,288 acre 2013 Mississippi Range Fire perimeter in the form of competitive and negotiated sales for commercial and personal use. After public and agency review of the PBIF, DOF reviewed comments, made changes as appropriate, and issued this FBIF. A person affected by the final decision who provided timely written comment or public hearing testimony on the preliminary decision may appeal it, in accordance with 11 AAC 02.

Because of fire damage and the risk of additional damage from black-spotted sawyer beetles (see Stand Silviculture section, p. 6), the PBIF determined that these salvage sales are emergency sales with respect to AS 38.05.113(c) as defined by 11 AAC 71.010(d) and must be expedited to avoid loss of market value. Therefore, these salvage sales within the area covered by this FBIF do not have to appear on a Five-Year Schedule of Timber Sales prior to sale. However, whenever feasible, DOF will include sales under this FBIF in the Five-year Schedule for the Delta Area.

Step 3: Forest Land Use Plans (AS 38.05.112). Prior to authorizing harvest of timber on any area greater than 10 acres, the DOF must adopt a site-specific Forest Land Use Plan (FLUP) for the harvest area. DOF will prepare FLUPs for harvest areas within the overall sale area covered by this best interest finding. FLUPs specify the site, size, timing, and harvest methods for harvest unit within the sale area. FLUPs also address site-specific requirements for access construction and maintenance, reforestation, and multiple use management. Draft FLUPs will be based on additional field work, agency and community consultation, and site-specific analyses by the DOF, and will be subject to public and agency review.

<u>Step 4: Timber sales and contracts.</u> Following adoption of the final best interest finding, and completion of the FLUPs, DOF will offer the timber for sale by auctioning competitive sales and negotiating some sales with purchasers. The Division will sign a contract with the winning bidder for each sale. The contract will include stipulations to ensure compliance with the best interest finding, FLUP, and statutory requirements.

<u>Step 5: Sale administration</u>. DOF administers timber sales and conducts field inspections to ensure compliance with the final best interest finding, FLUP, timber sale contract, and applicable laws, including the Alaska Forest Resources and Practices Act and Regulations (AS 41.17 and 11 AAC 95), and forest management statutes and regulations in AS 38.05 and 11 AAC 71.

#### E. PROJECT LOCATION, LAND STATUS, AND DESCRIPTION

#### 1. Location

This FBIF covers 41,703 acres of burned State land within the 67,288 acre perimeter of the 2013 Mississippi Fire. The burn area is bounded by the Delta River (east), Tanana River (north), Delta Creek (west) and the Military boundary (south). The State owns 41,073 acres in the burn area. The 26,215 acres of federal land within the Donnelly Military Training area, inclusive to the fire perimeter, is excluded from the sale proposal.

The project is located between the Delta River and Delta Creek within Sections 15, 22, 26, 27, 35 Township 9 South, Range 8 East; Sections 3 - 10, 13 - 36 Township 9 South, Range 9 East; Section

31, Township 9 South, Range 10 East; Sections 1, 4-9, and 16, Township 10 South, Range 9 East; Sections 6 and 7, Township 10 South, Range 10 East Fairbanks Meridian, Alaska.

This area is found on USGS quads: Big Delta A-4 and A-5 (see attached maps).

#### 2. Title Status

The proposed timber salvage areas are on General State land in portions of five townships. The acquisition authority and land classification is as follows;

Township & Range	Acquisition Authority	Classification Order	
T 9 S, R 8E, FMR	GS-2285 – Tentatively Approved	NC-90-002	
T 9 S, R 9E, FMR	GS-2285 – Patented	NC-90-002	
T 9 S, R 10E, FMR	GS-1069 – Combined		
T 10S, R 9E, FMR	GS-2285 - Tentatively Approved	NC-90-002	
T 10S, R 10E, FMR	GS-2285 - Tentatively Approved	NC-90-002	

There are no title restrictions beyond standard Federal reservations for ditches and canals on the parcels proposed for harvest.

#### 3. Land Use Planning, Classification, and Management Intent

The proposed area is within the Tanana Basin Area Plan unit 7G (Delta Creek). Most of the proposed harvest units are within subunit 7G2, which is classified High Value Resource Management with forestry, agriculture, public recreation, and wildlife habitat listed as important allowed uses. Two proposed harvest units are partially in subunit 7G3, which includes Rainbow Lake and a portion of Clear Creek (also known as the Richardson Clearwater River), and is classified Public Recreation, Watershed, and Wildlife Habitat.

There are no specific restrictions stated in the TBAP that are applicable to this proposed project. Forestry is allowed within subunit 7G3 if DNR determines it is consistent with the management intent for the unit. The proposed harvest units are designed to be consistent with the intent, including setbacks to avoid adverse impacts on lake(s) and stream(s). DOF consulted with the DNR Division of Mining Land and Water, Department of Fish and Game (ADF&G), and the DNR Division of Agriculture prior to adopting the Final Finding and Decision.

The Interagency Fire Management Plan includes these lands in the "Full" protection category.

No municipal plans apply – this area is not within a municipality.

#### 4. Current Access and Land Use:

This area is currently accessed via a winter crossing of the Delta River (known by several names including the Rainbow Lake Trail (ADL 415270) and the Whitestone Road and a series of roads initially cleared as winter logging roads, survey lines and fire lines. The proposed fire salvage areas are north and south of the Delta Creek winter road (ADL 416286) and west of the Delta River to Delta Creek. About 70% of the proposed harvest is south of the Delta Creek Road; the remainder is north and east of the road.

The Division of Mining, Land and Water (DMLW) manages all the land within the harvest areas. Non-state lands in the vicinity of the proposed salvage project exist on the northeastern border of the fire perimeter. Private land is located in three primary areas: Richardson Clearwater, Southbank Homesteads, and Whitestone Community. Most of the private land is in agricultural parcels used by

the Whitestone Community. Isolated private parcels also exist within the area. Ten 160-acre Federal grant homestead parcels are located at the northeastern corner of the fire perimeter. Additional agricultural parcels have been designated by DMLW west of the Delta River but have not been transferred to private ownership. The proposed timber salvage is not anticipated to have any adverse impacts on private property or land use in the general vicinity of the salvage area.

Recreational use of the proposed timber salvage areas occurs primarily in winter due to seasonality of the access. Winter roads that were constructed during previous harvest activities provide primary access. Residents of the Whitestone Community, Richardson Clearwater remote recreational properties, and Southbank Homesteads use the winter road system to reach cabins and homes.

Multiple trap lines and recreational trails are within the general vicinity. Local residents and hunters from throughout the state use this area for sport hunting. Sport fishing occurs on Rainbow Lake and along the Richardson Clearwater River.

#### 5. Background and Description of Proposal

- a. <u>Background</u>: The Mississippi Range Fire burned 67,288 acres of state and federal land west of Delta Junction in the summer of 2013. Following the fire, DOF reviewed existing land use plans, considered markets for the burned timber, and designed this proposal to salvage as much timber as possible from state land within the burn perimeter, while protecting the fish, wildlife, and water resources, and avoiding impacts to local access, recreation uses and archaeological sites.
- b. Timber volume and sustained yield: The project area has an estimated volume of 8,567,000 board feet or 4,280,000 cubic feet of white spruce, birch, and aspen sawtimber on approximately 6,800 acres of land. The Delta Area Annual Allowable Cut (AAC) is calculated at approximately 5,000 acres of harvest annually. The Sustained Yield (SY) volume is calculated at over 5,200,000 cubic feet annually. Harvest duration for this proposal is expected to occur over a 10 year period. This action alone or in combination with timber sales (proposed or sold) will not exceed the Delta AAC or SY volume due to the proposed harvest duration or anticipated sale schedule.
- c. <u>Harvest unit design</u>: Unit size is anticipated to range between 0.5 acres and 200 acres. Sale unit boundaries will be located along the fire perimeter and naturally occurring vegetative type changes within the burn. A 330-foot buffer, external to the fire perimeter, may be harvested to include fire damaged timber or to provide strategic management options to minimize pest or windthrow mortality.

The sale areas will be designed to encourage harvest of all species and sizes of burned trees within the designated harvest units. All harvests, commercial and personal use, shall be managed on the landscape with the intent to minimize impacts to the designated uses listed in the TBAP. Harvests will be subject to the Forest Resources and Practices Act and regulations.

d. <u>Reforestation</u>: Passive, natural, reforestation will be used due to expected recolonization of the area by hardwood species. Birch is expected to establish in the upland locations and aspen and balsam poplar will recolonize the lowland and moist sites. White and black spruce will naturally regenerate as well, but due to the shade tolerance requirements of these conifer species, it is expected that growth will be minimal until adequate shade exists on site. This methodology has been proven to be a successful burn area reforestation strategy in the Delta area as evidenced on the Carla Lake, Gilles Creek, and Camp Creek fires.

Supplemental planting of burn areas is typical where inadequate seed banks are known to exist or a species conversion is used in order to mitigate an areas fuel hazard rating. Neither of these needs exist in the proposed area.

e. New access design and construction: Roads constructed during timber harvest operations are designed and utilized as temporary access routes to conduct specific silvicultural activities on the land. Ancillary use of the roads by the general public occurs, but must be managed as a matter of safety during silvicultural operations or to protect the resource values of the area. Proposed forest access roads will initially be constructed to a secondary winter road standard. The roads will be constructed by removing the trees and vegetative mat. Roads will be constructed using cut and fill excavation with earth moving equipment producing running surfaces 12-16 feet wide.

Proposed road locations are generally on flat and/or rolling topography with low potential to erode during spring break-up and rainy weather. Roads will be built and maintained consistent with the best management practices in the Alaska Forest Resources and Practices regulations (11 AAC 95) and Tanana Valley State Forest Management Plan (Appendix A).

Timber sale contracts will require measures to prevent erosion including installation of water bars, sediment barriers, fiber mats, and placement of culverts where needed. (All installations requiring vegetative barriers or mats will utilize certified weed free materials or products.) The proposed access routes do not cross any streams west of the Delta River but will cross seasonal drainages. Culverts, rolling dips or water bars will be placed or constructed where necessary to prevent erosion.

Secondary access roads that could be used for future harvests of unburned timber will be maintained as inactive roads following initial harvesting. These roads will be closed to highway vehicles at the beginning of the road and maintained to prevent erosion. Any roads that will not be necessary for future timber sales will be permanently closed after reforestation efforts are completed. Road maintenance and road closure actions will be conducted consistent with the best management practices in the Forest Resources and Practices regulations.

Natural debris, concrete barriers, or "tank trap" road impediments will be used to close roads as necessary to highway vehicles. Established and existing public access routes (including trails, easements, and public access routes) will remain accessible and open to prescribed uses. All trails and access routes bisecting logging access roads will be kept open during harvest activities.

DOF proposes to extend access by constructing spur roads from the existing Delta Creek and Delta West winter roads. The attached map shows approximately 19 miles of mainline road that could potentially be constructed if all salvage areas were harvested. Approximately 7 miles of spur roads could be constructed to access areas off of the mainline haul roads. It's doubtful that all areas will be accessed and harvested.

Preliminary information regarding the burned area indicates access development for harvesting on ridgelines east of Rainbow Lake and South of the Delta Creek Road. Additional access north from the Delta Creek road into mixed stands of burned timber will also occur. Final mainline road locations will be determined after further ground and aerial reconnaissance associated with specific FLUP(s) development, and in consultation with DMLW and ADF&G. Access will be designed and operated to not hinder the use of the Rainbow Lake Trail public easement managed by ADF&G.

f. Appraisal method: Based on transactional evidence and market demand for saw logs/ cabin logs and fuelwood volume, the DOF will apply a likely value for those delivered products. The State will be compensated based on that market rate minus the estimated total harvest cost. The DOF will factor in local demand, timber type, amount of decay, and economies of scale in its decision to differentiate the cordwood from the sawlog volumes in the FLUP(s). The method of payment will be based on standardized scaling methods: Scribner Decimal C for sawtimber/ house logs and Huber Cubic scaling rule for fuelwood.

#### F. RESOURCES AND MANAGEMENT

#### 1. Timber stand composition and structure:

The forest stands to be salvaged were a mixture of fully mature white spruce, aspen and birch sawtimber prior to the 2013 fire. There were some stands of young white spruce, birch and aspen, but most of the burned area had mature forested stands. An estimated 74% of the stands were composed of hardwood species of which 60% is birch. The forested stands surrounding the proposed project area comprise a variety of stand mixtures including mature white spruce, black spruce, birch, and aspen.

#### 2. Stand silviculture:

The fire burned from May 30<sup>th</sup> through September, 2013. White spruce damaged by fire before August attracts infestations of the large white spotted sawyer. These are large black flying insects with a small white patch on the back behind the head and long black antenna. They are common in the Tanana Basin during July. The beetles can be easily heard boring holes to lay larvae that will hatch next summer. White spruce with large beetle infestations will be riddled with 3/8" sized holes in the wood, devaluing its marketability\_by fall of the next year. Due to the late fire occurrence, damage from these boring insects may be minimal in 2013 but damage is certain in the summer of 2014, reducing the white spruce to fuelwood use exclusively.

A mature stand of burned spruce or mixed spruce and aspen/birch typically reforests to aspen or birch as the primary species after the fire. Birch and aspen stands typically recolonize burned areas within 4-6 years. The mechanics of how white spruce reforests after a fire are not well understood. In this fire, there were many proposed salvage areas that had a low intensity ground fire or "under burn" and some that burned intensely with crown fires. White spruce cone yields are high this year and may establish a white spruce forest if adequate moisture is present next spring and if there is an adequate seed source with wind dispersal.

#### 3. Topography and Soils:

The proposed project area is on uplands that extend from the 1,000-foot elevation in the Delta River and Delta Creek drainages to 1,250-foot elevation ridge tops. Slopes within the project vary from flat to 40% with the average being about 2%. Soils are sandy loess loams near the surface over glacial till and gravels that start about 0.5-2 feet below the surface.

#### 4. Agriculture:

Agricultural lands and uses occur on private lands in the vicinity of the salvage area. Some state land is designated for future agricultural use and has legally surveyed property boundaries. Survey markers will be protected during harvest activities if the markers are within or adjacent to a harvest unit. Timber harvest in these designated agricultural areas may facilitate conversion to agricultural lands. DOF will coordinate with the DNR Division of Agriculture regarding future land management opportunities, specifically land conversion for agricultural development, where timber harvest areas occur on designated agricultural lands.

#### 5. Wildlife habitat and harvest:

Most common species of wildlife that are normally found in interior Alaska forests inhabited the area prior to the fire. Large animal species may be displaced from the burn areas until sufficient hiding, thermal cover and sufficient browse is available. Timber harvest in burn areas is not expected to diminish available cover for these species. There is potential for moose foraging on

hardwood regeneration in fall (leaf stripping) and winter (browsing), which in extreme cases can accelerate or facilitate transition from hardwoods to conifers possibly reducing biomass yield in the short term. Timber harvest may reopen areas for hunting access as most of the burn areas are currently a tangle of toppled trees.

Small animal species typically recolonize a burn area quickly. Long-time trappers have stated that some of the best trapping can occur in burn areas, especially for lynx and coyote due to the resulting high vole populations. Grouse and other birds use new growth in the burn areas for food and habitat as well.

Hunting and trapping occur in the area. Active trap lines are located in the vicinity of the proposed salvage areas. Historically, there has been significant hunting activity in the area due to relatively high moose density and close proximity to Delta Junction.

#### 6. Fish habitat and harvest, water resources, and water quality:

Perennial and seasonal surface waters, lakes, and many ponds lie within the project area. South of the Delta Creek Road, hilly moraine and dune structures result in no identifiable surface channels, but rather lakes and ponds connected by wetlands and low swales. Rainbow Lake (approximately 100 acres) is the largest lake and is stocked with rainbow trout by ADF&G. As such it is a Type III-A high value resident water body.

North of Delta Creek Road is the historic floodplain of the Tanana River. A number of clear water streams fed by upwellings are present and provide high quality spawning and rearing habitat for anadromous and resident fish species including chum salmon, coho salmon, and Arctic grayling. Because of their upwelling origins, these streams have relatively stable water temperatures and flows, and many remain at least partially ice free in the winter. Many of these clear water streams are catalogued as anadromous water bodies and/or identified as high-value resident fish streams. These significant water bodies are within the vicinity of the proposed harvest areas. DOF will utilize a 300-foot buffer to mitigate impacts that may occur, during harvest activities, to these clear water streams.

No logging or road construction is proposed in the riparian areas of these tributaries or lakes, but there will be road construction and harvest activities in the uplands and islands adjacent to them. There are no adverse affects anticipated upon the fish resources from the proposed project at this time. Adherence to careful road construction and maintenance practices will be necessary to insure that water quality for fish habitat is maintained. The Forest Practices Act and its Regulations are designed to protect fish habitat and water quality from impacts of forest operations. If access requires Title 16 (Fish Habitat) Permits from the ADF&G Division of Habitat to construct access to the project area, they will be pursed as needed and according to statutory requirements.

There are no anticipated adverse effects on water quality. Portions of the Richardson Clearwater River and Providence Creek lie within or bound the northern edge of the burn area and have been noted as streams that have significant water quality concerns. No commercial salvage harvest areas are proposed within 600 feet of the ordinary high water mark (OHW) of these two streams. Only personal use harvests of downed timber, utilizing normal hand tools, along the fire line will be allowed inside of the 600-foot buffer. No harvests will occur within 300 feet of OHW along these streams. The proposed project is not anticipated to alter the watershed.

Signage, delineating the riparian area, public information and stipulations noted on firewood permits will be used to educate and inform the public regarding areas closed to harvesting. Additionally, DOF personnel will be performing field monitoring and inspections of these areas as public firewood harvesting progresses.

There is no commercial fishing in the area. Sport fishing occurs on the Richardson Clearwater River, Providence Creek, and Rainbow Lake.

#### 7. Recreation, tourism, and scenic resources:

General recreational use of the proposed timber salvage areas is low or non-existent during the summer months due to the seasonality of the access. Winter recreational use of the area is moderate to high. Access to the project area is readily available due to winter roads that were constructed during previous harvest activities. Local residents use the winter road system to access cabins and home sites.

Multiple trap lines and recreational trails are within the general vicinity. If any trails are encountered during road construction contractors will provide for trail crossings as well as post warning signs along the road.

The region's scenery includes the lakes and streams that draw recreational users and views south to the Alaska Range. Typical interior Alaska views of forested vistas and mountainous horizons typify this area. Visual impacts from the proposed harvests are not anticipated to be within view of the general public. Sale area layouts will mimic the irregular borders associated with natural disturbances in areas where scenic values are of concern.

There is no known tourism in the proposed salvage area.

#### 8. Cultural Resources:

DOF has been working with the State Historic Preservation Officer (SHPO) to identify and avoid known cultural, historic or prehistoric sites in planning the proposed access routes and salvage areas. If additional archaeological sites are identified, proposed salvage areas and road locations will be appropriately adjusted to avoid conflicts. If any historic or archaeological sites are encountered during road construction or harvest activities, DOF will immediately inform SHPO and take action to protect the findings.

All harvest will occur during the winter which will avoid impacts to cultural resources. Care will be taken to locate road construction/ development to areas with low archeological potential, specifically low to mid slope orientation.

#### 9. Subsurface Resources:

There are no mining claims in the proposed project area.

#### G. COSTS AND BENEFITS

No significant negative economic effects are anticipated upon the timber markets, local or regional, as result of this proposed action. Salvage of the proposed timber volume may provide a short-term benefit to the local economy due to the availability of low-cost fuel for home heating and jobs in timber harvesting. DOF will need to monitor firewood harvesting operations because of the strong possibility of illegal harvesting. DOF may have to close roads to the commercial and personal use timber sales to prevent unauthorized harvest.

The Division of Forestry has provided personal use firewood permits and small personal use sales from this area to ensure an adequate supply of firewood for the local residents. Public use firewood demand on this area is expected to be quite high during the winter access period. The Division will continue to issue general use permits and designate areas for personal use sales within the salvage area boundary. Commercial timber salvage harvest operations will provide winter road maintenance facilitating public access to the salvage areas.

#### H. PUBLIC COMMENT AND OUTREACH

The DOF engaged in public outreach for the initial Preliminary Best Interest Finding (PBIF) during the 30-day public review and comment period that began on October 14, 2013. The Preliminary Best Interest Finding and Decision for the Mississippi Fire Salvage ADL - 419335 was available for agency and public review and comment, concurrently, between October 14, 2013 and November 15, 2013.

During the review for this finding, the division used a variety of methods to contact interested agencies, organizations and individuals concerning the proposed salvage sale in the Delta resource area. In addition to posting the public notice and copies of the PBIF on the state's web pages, the division placed a display ad in the local Delta newspaper, Delta Wind. Public notices were mailed or hand delivered for posting at area Post Offices and Public Libraries; copies of the PBIF were available for viewing at the public libraries and Area Offices in Delta; and public notices were mailed or emailed to the DOF mailing list for FLUPs in the Delta Area and to Alaska Native organizations and tribal groups in the area. Finally, two public meetings on the PBIF took place in Fairbanks in conjunction with Alaska Board of Forestry and Tanana Valley State Forest Citizens' Advisory Committee meeting. Delta Area DOF staff engaged in direct consultations with local landowners about this proposed finding. Division staff also worked with the Alaska Department of Fish and Game, Habitat Division and the DNR Division of Mining, Land, and Water who provided substantive input on the BIF.

Three agency comments were received on the PBIF. One public comment was received during the comment period. Commenters were supportive of salvaging state timber resources before significant degradation occurred. The comments have been consolidated into a matrix in Appendix B that summarizes comments received and DOF's response to those comments.

#### I. ACTION ALTERNATIVES CONSIDERED

#### 1. Conduct the project as proposed:

This alternative meets the objectives for timber salvage prior to loss of economic value, returning the site to a young productive mixed forest, providing commercial timber products. It will also provide fuelwood to the local area and commercial dry firewood to the Fairbanks market. Additional employment opportunities will occur associated with salvage operations saw milling and value-added processing.

#### 2. Modify the project by making it smaller or larger:

The estimated volume and acreage of timber to be salvaged from the Mississippi Fire Salvage as stated in this Best Interest Finding is designed to accommodate the existing market in the vicinity of Delta Junction as well as provide commercial fuelwood to the Fairbanks area. There is little opportunity to increase the size of the proposed project because most of the commercial sized timber was included in this proposal. Some commercial stands were left out of the proposal for archaeological concerns or were not feasible due to access development costs. Decreasing the size of the project would potentially waste valuable timber that was burned that could be used in the local economy in the next 1-10 years.

#### 3. Defer the project to a later date:

Deferring harvest to a later date would result in lost timber value. Burned timber degrades rapidly due to subsequent infestations of insects, sap rot, wind throw and checking. The value of the timber could drastically decline within the next 12 months for both the industry and the State. Access to the salvage area is only during the winter months; delaying this project would not allow the timber industry to utilize the available sawtimber and the local area residents would not have access to firewood that is in extremely high demand.

#### 4. Cancel the project:

Canceling the project would not meet the objectives outlined for this management action. The burned timber would not be utilized, and there would be no contribution to the State and local economies.

#### J. FINAL FINDING AND BEST INTEREST DECISION

After due consideration of all pertinent information and alternatives, the DNR has reached the following Final Finding and Best Interest Decision: **To offer for sale approximately 6,800 acres of fire salvage timber to provide sawtimber, fuelwood and personal use firewood to Delta Junction and the surrounding area as proposed and described in this BIF**. The DOF finds that this decision satisfies the objectives stated in this document and it is in the best interest of the State to proceed with this action under its authority in AS 38.05.035(e) (Powers and Duties of the Director) & AS 38.05.110-120; 11 AAC 71 (Timber Sale Statutes and Regulations).

In addition, the Division finds that salvage sales within this area are emergency sales with respect to AS 38.05.113 (Five-year Schedule of Timber Sales) as defined by 11 AAC 71.010(d). These sales must be expedited to avoid loss of market value of timber that has been damaged by fire. I find that this proposed action is in the best interest of the State, and approve it to proceed with this action.

The finding presented above has been reviewed and considered. Public notice has been accomplished in accordance with AS 38.05.945. The case file has been found to be complete and the requirements of all applicable statutes have been satisfied. I find that it is in the best interests of the State to proceed with this conveyance under the authority of AS 38.05.035(e) (Best Interest Finding); AS 38.05.110-120; 11 AAC 71 (Timber Sale Statutes and Regulations); AS 41.17.010-.950 and 11 AAC 95 (Forest Resources and Practices Statutes and Regulations).

Signed,

John "Chris" Maisch, Director

Alaska Division of Forestry

12/12/13

Date

#### REQUESTS FOR RECONSIDERATION

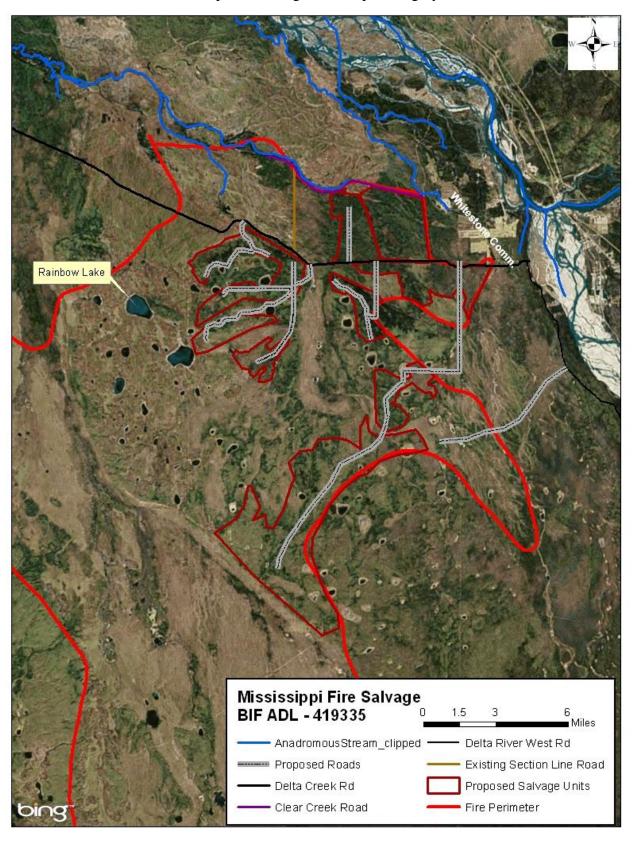
A person affected by this decision who provided timely written comment or public hearing testimony on this decision may appeal it, in accordance with 11 AAC 02. Any appeal must be received by December 6, 2013 and may be mailed or delivered to Joe Balash, Commissioner, Department of Natural Resources, 550 W. 7th Avenue, Suite 1400, Anchorage, Alaska 99501; faxed to 1-907-269-8918, or sent by electronic mail to mailto:dnr.appeals@alaska.gov. If no appeal is filed by that date, this decision goes into effect as a final order and decision on December 16, 2013. An eligible person must first appeal this decision in accordance with 11 AAC 02 before appealing this decision to Superior Court. A copy of 11 AAC 02 is enclosed. If you have any questions, please contact Al Edgren of the Delta Area Office at (907) 895-4225 or e-mail al.edgren@alaska.gov.

#### **ATTACHMENTS**

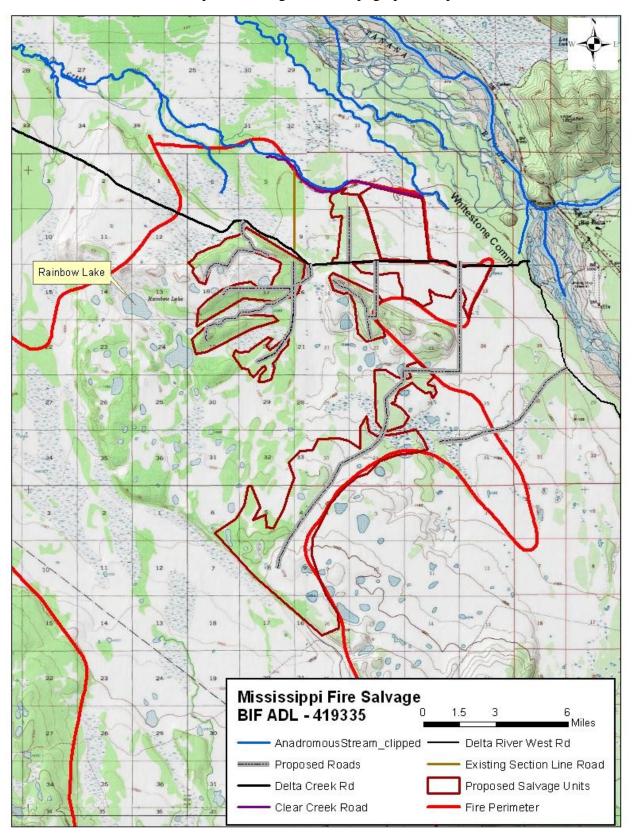
Maps: Spot Imagery and Topographic

Appendix A: Tanana Valley State Forest Road Specifications

Appendix B: Comment Matrix - Preliminary Decision and Best Interest Finding



#### Proposed Salvage Areas Topographic Map



## **Appendix A - Northern Region Forest Road Standards (Tanana Valley State Forest Management Plan)**

Design Considerations					
	Level of Use	Curve Radius	Grade	Drivable Surface	Turnouts
Primary all- season road <sup>(1)</sup>	Moderate to Heavy; Long Term; Year-round	300' normal design 100' minimum <sup>(2)</sup> Curve widening on minimum radius curves	8% Normal 10% Maximum	16'-20' Width and Rock Surfacing may be Required.	Not Required if Driving Surface ≥ 18'.  Otherwise 1000' feet Max. interval.  Intervisible. 25' ingress, 25' egress, 50' Full.  12' Width
Secondary all- season road	Light to Moderate; Long Term; Year-round	100' normal design 60' minimum <sup>(2)</sup>	15% Max. Favorable 10% Max. Adverse	12'-16' Width.	Same as Above
Spur Road	Light; Short Term	Same as Secondary All- Season Road	20% Maximum	10'-16' Width.	Not Required
Primary Winter Road	Moderate to Heavy; Long Term	Same as Primary All- Season Road	Same as Primary All- Season Road	16' to 20' Width	Same as Primary All-Season Road
Secondary Winter Road	Light to Moderate; Medium to Long Term	Same as Secondary All- Season Road	Same as Secondary All- Season Road	Same as Secondary All- Season Road	Same as Primary All-Season Road

Note (1) - Higher construction standards may be needed for site specific projects and conditions.

Note (2)- To be applied only under topographically limiting conditions.

## **Appendix A - Northern Region Forest Road Standards (Tanana Valley State Forest Management Plan)**

Construction Considerations					
	Cut and Fill	Clearing <sup>3</sup>	Grubbing	Debris Disposal	Permafrost
Primary all- season road <sup>(1)</sup>	Fill slope 1.5: 1 Max. Cut slope 1:1 Max. excepting Loess soils where vertical cuts are acceptable See also 11 AAC 95.290c.	5' beyond cut and fills or min. 35' width. Merch. Timber cut and decked ahead of Construction.	Removal of Stumps, roots, and organics from road bed to outside of ditches unless tops of stumps under 2' of fill	If ≥ 2' beyond ditches, windrow or place in pushouts. If ≤ 2' bury under min. 1' of fill.	Avoid exposing thaw unstable permafrost through routing or using raised fill construction. If exposed, min. sedimentation w/ effective erosion controls. See 11 AAC 95.290c.
Secondary all- season road	Same as above	5' beyond cut and fills or min. 30' width. Merch. Timber cut and decked ahead of Construction.	Same as above	Same as above	Same as above
Spur Road	Avoid where reasonable and prudent	Min. 12' width. Merch. Timber cut and decked ahead of Construction.	Under Drivable Surface	Use Windrowing or Push- out techniques as appropriate	Avoid exposing thaw unstable permafrost. If exposed, stabilize by treating w/ effective and appropriate measures, sp. Recovering, seeding, drainage struct. And settling basins.  See 11 AAC 95.290c., g.; 295 g.
Primary Winter Road	Minimize cuts and fills in thaw-unstable permafrost. Avoid where feasible and prudent, cuts in thaw unstable permafrost; exceptions will be identified in FLUP.	Minimum 16'	Partial removal of surface organics only as needed to provide a level running surface.	Same as Spur Road	Same as Spur Road
Secondary Winter Road	Avoid where feasible and prudent, cuts in thaw unstable permafrost; exceptions will be identified in FLUP.	Minimum 12'	Same as Primary Winter road Road	Same as Spur Road	Same as Spur Road

Note (1) - Higher construction standards may be needed for site specific projects and conditions.

Note (3)- Minimum is used for safety and snow storage reasons

## **Appendix A- Northern Region Forest Road Standards (Tanana Valley State Forest Management Plan)**

Maintenance Considerations					
	Ditches	Culverts	Maintenance		
Primary all- season road <sup>(1)</sup>	1.0' Min. Depth; 2.0 Min width. Block Ditch on Down hill Side of culvert inlet where needed.	Min.Dia 12" except as stated in 11 AAC 95.295.  Installed at or below natural ground line and natural stream gradient.	Grading and Ditching as Necessary		
Secondary all- season road	Block Ditch on Down hill Side of culvert inlet where needed.	Same as Above	Grading and Ditching as Necessary. Maintained or Closed after logging use.		
Spur Road	As Needed	Same as Above	Closed or treated as per 11 AAC 95.315(c) after logging use		
Primary Winter Road	None	Same as Above	Open drainages before breakup.		
Secondary Winter Road	None	Same as Above	Closed or treated as per 11 AAC 95.315(c) after logging use. Open Drainages before breakup.		

## **Appendix B: Comment Matrix - Preliminary Decision and Best Interest Finding**

## Mississippi Salvage Agency & Public Review Comments Matrix

Commenter	Received	Comment	Action
DNR, Division of Agriculture Daniel Proulx	10/16/2013 email	Request involvement of the Division of Agriculture regarding road locations on Ag. Lands; specifically, road located in Section 10 traversing N-S should be located along the section line. Minimize impacts to soils during logging operations.	DOF realigned road in Section 10. Harvests will occur during winter months thereby mini- mizing soil impacts.
DEC, Division of Water Kevin Hanley	11/4/2013 email	No significant concerns for the maintenance of water quality.	Comment Recognized and Recorded.
ADF&G Division of Habitat James Durst	11/8/2013 email	Requested measures to reduce risks of invasive plant introductions be defined. Clarification of access management for harvest areas. Riparian harvest restrictions; implementation and monitoring processes. Addition of Rainbow Lake trail as an existing route.	DOF explained in greater detail management strategies that will be utilized to maintain and protect the resources in the area in Final BIF.
Public Comment - General	11/11/2013	Agreed with DOF position- "to offer for sale the timber that was burned	
1 Public Comment received	USPS	is probably the most logical action the State can do. Please proceed to Final Finding"	DOF will move forward with Final Finding